

**Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services**

**STATEMENT OF BASIS**

**Exide Technologies, Inc.  
Baton Rouge Smelter  
Baton Rouge, East Baton Rouge Parish, Louisiana  
Agency Interest Number: 1396  
Activity Number: PER20070001  
Proposed Permit Number: 0840-00004-V1**

**I. APPLICANT**

**Company:**

Exide Technologies, Inc.  
PO Box 74040  
Baton Rouge, Louisiana 70874-4040

**Facility:**

Exide Technologies, Inc.  
2400 Brooklawn Dr  
Baton Rouge, East Baton Rouge Parish, Louisiana  
Latitude: 38° 35' 7" 48 Longitude: 91° 14' 36" 92

**II. FACILITY AND CURRENT PERMIT STATUS**

In 1995, Schuykill Metals Corporation was purchased by Exide Corporation, who in 2001, underwent a name change to Exide Technologies. Permit No. 0840-00004-00 was issued July 12, 1995; the company currently operates under Permit No. 0840-00004-V0 issued on September 20, 2006, which is an amendment to Permit No. 0840-00004-V0 issued on October 5, 2005.

The Baton Rouge Smelter recycles inorganic lead-bearing materials, primarily spent lead acid batteries, into refined lead and lead alloy in the form of lead pig and block ingots. Customers use these products to make weights, bearings, ammunition, chemicals, and batteries.

**III. PROPOSED PROJECT/PERMIT INFORMATION**

**Application**

A permit application and Emission Inventory Questionnaire were submitted by Exide Technologies, Inc. dated April 5, 2007 requesting a Part 70 operating permit. Additional information dated August 31, 2007 was also received.

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This minor modification application is being submitted to reconcile sulfur dioxide emissions from the Blast Furnace No. 1 and the Reverberatory Furnace No. 3 with actual emissions due to recent engineering studies performed in March and July 2006 and January 2007. These studies showed sulfur dioxide emissions higher than permitted. Exide believes the sulfur dioxide reduction efficiency was an incorrect estimate based on literature provided by the manufacturer of the desulphurization unit.

**Project**

Exide requests the following modifications:

- Reconcile emissions from the Blast Furnace No. 1 and the Reverberatory Furnace No. 3.
- Decommission No. 6 Baghouse and route the emissions to No. 7 Baghouse.
- Add to the equipment list a cartridge filter near the No. 1 Casting machine. An Authorization to Construct approved this filter for construction on September 10, 2007.

The above changes do not constitute a major modification.

**Proposed Permit**

Permit No. 0840-00004-V1 will be a modification to the Part 70 operating permit for the Baton Rouge Smelter Facility.

**Permitted Air Emissions**

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM <sub>10</sub>	21.48	36.45	+14.97
SO <sub>2</sub>	1200.15	2,546.71	+ 1,346.56*
NO <sub>x</sub>	18.92	21.24	+ 2.32
CO	15.85	17.91	+ 2.06
VOC	1.23	1.34	+ 0.11
Pb	5.34	4.70	- 0.64

\* Increase in SO<sub>2</sub> emissions are due to reconciliation in emissions and not a project related change.

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#### **IV REGULATORY ANALYSIS**

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

##### **Prevention of Significant Deterioration/Nonattainment Review**

Increase in SO<sub>2</sub> emissions are due to reconciliation in emissions and not a project related change. Therefore, PSD does not apply.

##### **MACT Requirements**

The facility is a minor source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51 and, therefore, does not constitute MACT Requirements.

##### **Air Quality Analysis**

Dispersion Model(s) Used: ISCST3 (Screen)

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard {NAAQS})
Sulfuric Acid	8 hour	10.42 $\mu\text{g}/\text{m}^3$	23.8 $\mu\text{g}/\text{m}^3$
SO <sub>2</sub>	3 hour	847.548 $\mu\text{g}/\text{m}^3$	1300 $\mu\text{g}/\text{m}^3$
	24 hour	269.195 $\mu\text{g}/\text{m}^3$	365 $\mu\text{g}/\text{m}^3$
	Annual	50.22 $\mu\text{g}/\text{m}^3$	80 $\mu\text{g}/\text{m}^3$

##### **General Condition XVII Activities**

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

##### **Insignificant Activities**

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

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**V. PERMIT SHIELD**

A permit shield Per 40 CFR 60.6(f) and LAC 33:III.507.I has not been requested and is not included in the proposed permit.

**VI. PERIODIC MONITORING**

Exide Technologies, Inc. shall perform the following Monitoring:

Baghouses (including gaskets): Equipment/operational data monitored by technically sound method upon each occurrence of process unit shut down or whenever visible emission checks indicate maintenance may be necessary. Change elements as necessary.

Filter vents: Visible emissions monitored by visual inspection/determination daily. If visible emissions are observed, restore operation of the filter to its normal or usual manner of operation as expeditiously as practicable, but at a minimum within three working days, in accordance with good air pollution control practices for minimizing emissions.

Scrubber Flow rate monitored by flow rate monitoring device once every four hours.

Exide Technologies, Inc. shall perform the following Record Keeping:

Baghouses: Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of inspection. Keep records of maintenance inspections on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.

Filter vents: Visible emissions recordkeeping by electronic or hard copy daily. Keep records of visible emission checks on site and available for inspection by the Office of Environmental Compliance, Surveillance Division.

Scrubber Flow rate recordkeeping by electronic or hard copy once every four hours.

Exide Technologies, Inc. shall submit the following Report:

Submit report: Due annually, by the 31st of March for the preceding calendar year. List the hours that the scrubber operated out of the ranges specified. Submit report to the Office of Environmental Compliance, Enforcement Division.

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## VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H<sub>2</sub>S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO<sub>x</sub>) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH<sub>4</sub>), Ethane (C<sub>2</sub>H<sub>6</sub>), Carbon Disulfide (CS<sub>2</sub>)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit:  $\geq 10$  tons per year of any toxic air pollutant;  $\geq 25$  tons of total toxic air pollutants; and  $\geq 100$  tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM<sub>10</sub> – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

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**Sulfur Dioxide ( $\text{SO}_2$ )** – An oxide of sulfur.

**Sulfuric Acid ( $\text{H}_2\text{SO}_4$ )** – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

**Title V Permit** – See Part 70 Operating Permit.

**Volatile Organic Compound (VOC)** – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.